REMARKS

Initially, applicant gratefully acknowledges the Examiner's continual indication that claims 1 and 10-12 are allowed.

Further, applicant thanks the Examiner for extending the courtesy to the applicant's representative during the interview of June 11, 2008. During the interview, applicant's representative presented to the Examiner that independent claims 2, 3 and 7 include allowable subject matter of claim 1 (including subject matter of those three elements which the Examiner had indicated in his reasons for allowance of claim 1 in the previous Office Action of December 13, 2007).

The Examiner informed applicant's representative that claims 2, 3 and 7 do not entirely include subject matter of all the three elements (indicate in reasons for allowance of claim 1), and suggested including same in each of these claims to possibly define them over the applied references. In the present amendment, each of claims 2, 3 and 7 has been amended by incorporating entire allowable subject matter of claim 1, as discussed during the interview.

Therefore, each of claims 2, 3 and 7, and dependent claims 4, 5, 13 and 14 each depending from one of claims 2 and 3 are believed to be in condition for allowance.

Upon entry of the present Amendment-E, claims 1-5, 7 and 10-14 are pending in the application, of which claims 1-3 and 7 are independent. Claims 2, 3 and 7 have been amended by the present amendment. Claims 6. 8 and 9 have been withdrawn for consideration by the

Examiner in connection with a previously imposed Restriction Requirement.

The above-identified Office Action has been reviewed, the references carefully considered, and the Examiner's comments carefully weighed. In view thereof, the present

Amendment-E is submitted.

It is contended that by the present Amendment-E, all bases of objections and rejections set forth in the Office Action have been traversed and overcome. Accordingly, reconsideration and withdrawal of the objections and rejections is respectfully requested.

Amendments Presented

In the Claims: Claim 2 has been amended by further defining that the incident beam of light is directly projected from the object to the lens of the camera unit; and that the position of the object is compensated according to said discrepancy.

Claim 3 has been amended by further defining that the incident beam of light is directly projected from the object to the lens system of the camera unit; and that the position of the object is compensated according to said discrepancy.

Claim 7 has been amended by further defining that the position of the object is compensated according to the discrepancy.

Applicant respectfully submits that the above amendments are fully supported by the original disclosure, including the specification, claims and drawings, especially Figure 2, and the discussion thereof at paragraphs [049]-[051] of the specification. Applicant also respectfully submits that no new matter is introduced into the application by the above amendments because all of the subject matter thereof was expressly or inherently disclosed in the original application.

Claim Rejections --35 USC §102

In the Office Action (page 2, item 4), the Examiner rejected claims 2-3, 5, 7 and 13-14 under 35 USC §102(b) as being anticipated by Tanabata et al. (US Publication 2002/0196422).

Applicant's Response:

As stated above, applicant has amended claims 2, 3 and 7, herein. Upon careful consideration and in light of the above amendments, applicant respectfully traverses such rejection and submits that the rejection is overcome.

Applicant respectfully submits that each of claims 2-3, 5, 7 and 13-14 is patentably distinct over the teachings of Taniguchi et al. for several reasons including those detailed in the previously filed Amendment-C of November 12, 2007 and Amendment-D of March 11, 2008, and because each of independent claims 2, 3 and 7 has now been amended as suggested by the Examiner during the interview of June 11, 2008.

In this regard, applicant respectfully submits that each of independent claims 2, 3 and 7 has amended by <u>incorporating allowable subject matter in its entirety</u> as described at item 10 (discussing reasons for allowance of claim 1) of the previous Office Action of December 13, 2007, and as further discussed with the Examiner during the interview of June 11, 2008.

Applicant respectfully submit that Tanabata et al. fail to disclose or even suggest the

displacement of the incident beam of light relative to the reference point being a discrepancy of the incident beam of light relative to an optical center of a lens of the camera unit and the discrepancy being a minimum distance between the optical center and the incident beam of light, as required by each of independent claims 2, 3 and 7.

In response to Examiner's arguments stated in the Office Action (item 10, page 8) in relation to claims 2-5, 7 and 14, applicant respectfully disagrees with the Examienr's allegation – that, in his view, the claim language does not specifically point out how the claim language defines the claimed invention over the applied references – because applicant believes that each of independent claims 2, 3 and 7 was appropriately amended by including (at least some) allowable subject matter of claim 1 via Amendment-D of March 11, 2008 to define the claimed invention over the applied references.

Further, applicant respectfully disagrees with the Examiner assertion – that Tanabata et al. disclose the claimed limitations, i.e., a discrepancy being a minimum distance between the optical center and said incident beam of light, which, in his view, pose a pure geometric problem – because Tanabata et al. fail to disclose (or even suggest) the discrepancy being a minimum distance between the optical center and the incident beam of light, and because applicant believes that discrepancy being a minimum distance as required by the claimed invention is not a pure geometric problem.

Rather, Tanabata et al. disclose that the discrepancy used in calibration information for distance calculation, is a displacement of an image on an imaging plane produced by different passing positions obtained using a stored image. The displacement can be obtained by counting number of

pixels of the displacement of the image in taking any one of the passing positions as the reference.

Therefore, according to Tanabata et al., the displacement may be expressed by number of pixels.

Accordingly, the displacement as taught by Tanabata et al. is not dependent upon a minimum distance between the optical center and the incident beam of light, as required by the claimed invention.

Additionally, applicant respectfully submits that Tanabata et al., as shown in their Fig. 1, calculate the displacement of a refracted beam of light rather than that of an incident beam of light (as required by the claimed invention). As shown in Fig. 1 of Tanabata et al., incident light from a light source (dotted line) passes through a masking portion 110, representative opening parts 112a, 112b, and then through a lens 210, at which point the incident light becomes a refracted light. Therefore, according to Tanabata et al., the displacement discrepancy of the light is based on the refracted light, and not based on the incident beam of light, as required by the claimed invention.

Further, applicant respectfully submits that the total combination each of claims 2, 3 and 7 in not taught or rendered obvious by the reference of record, considered either singly or in combination. Therefore, each of independent claims 2, 3 and 7 is believed to be in condition for allowance.

Also, claims 4, 5 and 14, each depending from claim 3, and claim 13 depending from claim 2 are believed to patentably distinct over the references of record for the reasons provided in relation to claims 2 and 3. Accordingly, each of claims 4, 5, 13 and 14 is believed to be in condition for allowance.

For all the foregoing reasons, applicant respectfully requests reconsideration and withdrawal of the Examiner's rejection of claims 2-3, 5, 7 and 13-14 under 35 USC §102(b).

Claim Rejections - 35 USC §103

In the Office Action (page 6, item 6), the Examiner rejected claim 4 under 35 USC §103(a) as being unpatentable over the combination of Tanabata et al. and Day et al. (US 4,639,878).

Applicant's Response:

As stated above, applicant has amended independent claim 3, from which claim 4 directly depends. Upon careful consideration and in light of the above amendment to claim 3, applicant respectfully traverses such rejection and submits that the rejection is overcome and that claim 4 is patentably distinct over the applied references for the reasons stated in relation to claim 3 which are not overcome by additional teachings of Day et al.

For all the foregoing reasons, applicant respectfully requests reconsideration and withdrawal of the Examiner's rejection of claim 4 under 35 USC §103(a).

Allowable Subject Matter

In the Office Action (page 7), the Examiner indicated that claims 1 and 10-12 are allowed.

Applicant's Response:

Applicant gratefully acknowledges the Examiner's indication of the allowability of claims Land 10-12

Conclusion

Based on all of the foregoing, applicant respectfully submits that all of the objections and

rejections set forth in the Office Action are overcome, and that as presently amended, all of the

pending claims are believed to be allowable over all of the references of record, whether

considered singly or in combination.

Applicant requests reconsideration and withdrawal of the rejection of record, and

allowance of the pending claims.

The present amendment is being concurrently filed with a Request for Continued

Examination (RCE) and a fee (\$810) for same is being paid online via EFS-Web.

If the Examiner is not fully convinced of the patentability of all of the claims now in the

application, applicant respectfully requests that the Examiner contact applicant's undersigned

representative to expeditiously resolve any issues remaining in the prosecution of the application.

Favorable reconsideration is respectfully requested.

Customer No. 21828

Carrier, Blackman & Associates, P.C.

24101 Novi Road, Suite 100 Novi, Michigan 48375

July 25, 2008

William Blackman Attorney for Applicant

Respectfully submitted,

Registration No. 32,397 (248) 344-4422

CERTIFICATE OF ELECTRONIC TRANSMISSION

TP. Shende

I hereby certify that this correspondence is being electronically transmitted, via EFS-

Web, to the United States Patent and Trademark Office, on July 25, 2008.

WDB/fs